

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
6 May 2004 (06.05.2004)

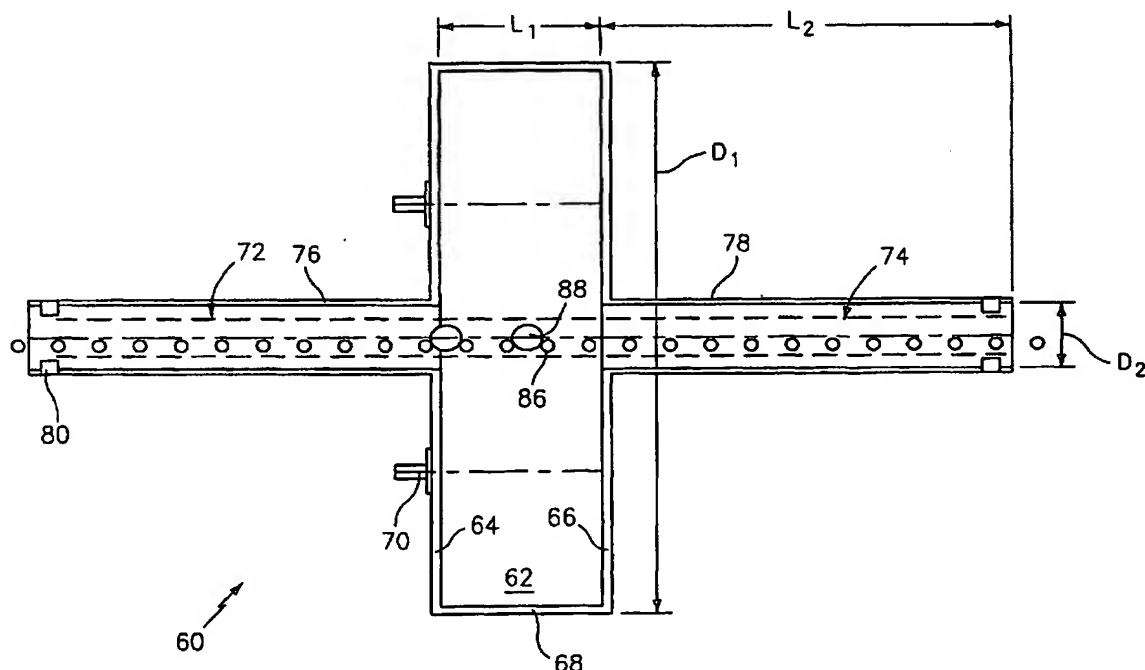
PCT

(10) International Publication Number
WO 2004/037012 A3

- (51) International Patent Classification⁷: **A23L 1/32**, 3/01, A23B 5/01
- (21) International Application Number: PCT/US2003/025526
- (22) International Filing Date: 14 August 2003 (14.08.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
60/403,397 14 August 2002 (14.08.2002) US
60/403,399 14 August 2002 (14.08.2002) US
60/403,400 14 August 2002 (14.08.2002) US
- (71) Applicant (for all designated States except US): **PAS-TURA FOODS, LLC** [US/US]; 2 Railroad Place, Westport, CT 06880 (US).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): **MCNULTY, Bernard, A.** [US/US]; 14 Mountain View Drive, Weston, CT 06880 (US).
- (74) Agent: **SLATE, William, B.**; 900 Chapel Street, Suite 1201, New Haven, CT 06510 (US).
- (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:
— with international search report

[Continued on next page]

(54) Title: MICROWAVE EGG PASTEURIZATION METHOD AND APPARATUS



(57) Abstract: A microwave apparatus is used to pasteurize eggs (Figure 1). The apparatus may include means for preferentially microwave heating yolk of the eggs (Figure 2). The albumen may be separately heated (Figure 3) or may be pre-cooled. Alternatively, the albumen may be heated by diffusion from the yolk in one or more stages or may be heated in an additional stage along with the yolk.



— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(88) Date of publication of the international search report:

24 June 2004

Rec'd FBI/PTO

10/524315

09 FEB 2005

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/25526

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A23L 1/32, 3/01; A23B 5/01
US CL : 426/614, 521, 234, 241

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
U.S. : 426/614, 521, 234, 241

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 4237145 A (RISMAN et al) 02 December 1980 (02.12.1980), see entire document.	1-24
A	US 6231909 B1 (LEVINSON) 15 May 2001 (15.05.2001), see entire document.	1-24
A	US 5293021 A (DAVIS) 08 March 1994 (08.03.1994), see entire document.	1-24
A	US 6024999 A (HAMID-SAMIMI) 15 February 2000 (15.02.2000), see entire document.	1-24
Y	US 4511589 A (PADLY et al) 16 April 1985 (16.04.1985), see entire document.	10 and 13-16

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

16 April 2004 (16.04.2004)

Date of mailing of the international search report

03 MAY 2004

Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Facsimile No. (703) 305-3230

Authorized officer

Anthony Weier

Telephone No. (571)272-0987